Botswana

The following provides a summary of specific guidelines from the country's national guidance strategy. Use the jump links in yellow to access details on first-, second-, and third-line treatment regimens by patient population, in accordance with the WHO guidelines. This summary can be downloaded or e-mailed to yourself or a colleague. The original country guidance document can also be found below the jump links for download.

Patient Population **Download summary page as PDF** **E-mail this page**
Suggest Updates

- Botswana National HIV & AIDS Treatment Guidelines (**PDF** / 8 **MB**)

Adults and Adolescents (10 - 19 Years old)

Year Issued:

2012

HIV/TB Co-Infection Addressed:

Yes

Criteria for Treatment:

For all adults and adolescents (regardless of pregnancy status), either one of the following conditions require ART initiation:

- WHO clinical stage 3 or 4, or
- Any CD4 cell count less than or equal to 350 cells/μL (previously less than or equal to 250 cells/μL)

Special Considerations for ART Initiation:

If an HIV-infected patient has a WHO clinical stage 3 or 4 condition, the patient's clinical condition is poor, and the CD4 cell count or % is pending, do not wait for the CD4 count or % to return:

- Initiate ART on the basis of WHO clinical stage 3 or 4 condition
- Do not delay CTX prophylaxis.

However, when beginning ART in an adult/adolescent without an available CD4 count, consideration must be given to the possibility that the patient might have a high baseline CD4 count. Therefore, start patients requiring initiation without baseline CD4 counts on EFV-based ART (or LPV/r if EFV is not appropriate) because of the increased risk of NVP-induced hepatotoxicity with high baseline CD4 count.

Other HIV-related conditions which may justify ART

- Severe WHO stage 2 conditions, e.g., severe dermatitis
- Disproportionately low CD4% (less than or equal to 15%) in an adult with absolute CD4 count greater than 350 cells/µL.
- In all such patients, consult an HIV Specialist for possible ART initiation.

Regimen Options:

First Line:

Before initiating ART in female adults and adolescents, establish whether there has been a history of sdNVP for PMTCT within the previous 6 months.

Standard First Line Regimens in New Treatment-Naïve Patients:

TDF + FTC (or 3TC) + EFV (as a single dose combination: Atripla)

Second Line:

TDF + FTC (or 3TC) + EFV or NVP switch to: AZT + 3TC + LPV/r (Kaletra or Aluvia)

If anemia: (Hbg , 7)

ABC + 3TC + LPV/r

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

First Line:

If EFV intolerant , CD4 cell count greater than 250 (women) or greater than 400 (men) cells/µL: TDF + FTC (or 3TC) + LPV/r

Second Line:

For those who fail the First Line Regimen of : AZT + 3TC + NNRTI switch to: TDF + FTC + LPV/r (including women started on AZT-based ART during pregnancy)

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

First Line:

If EFV intolerant, CD4 cell count less than or equal to 250 (women) or less than or equal to 400 (men) cells /µL:
TDF + FTC (or 3TC) + NVP

Second Line:

For those who fail the First Line Regimen of : ABC + 3TC + NNRTI switch to: TDF + FTC + LPV/r (if renal insuffiency or anemia, discuss with an HIV Specialist)

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

First Line:

If women received sdNVP within the prior 6 months:
TDF + FTC (or 3TC) + LPV/r

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

First Line:

Adult patients currently on a fully suppressive modified First Line regimen of d4T + 3TC (or ddI) + EFV or NVP should be switched to :

TDF + FTC + EFV or NVP

Second Line:

Adult patients who are currently on a fully suppressive second line regimen of d4T+ ddI + LPV/r should be switched to: TDF + FTC + LPV/r

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

Reference:

Botswana National HIV & AIDS Treatment Guidelines (2012)

Children Greater than 5 Years

Year Issued:

2012

HIV/TB Co-Infection Addressed:

Yes

Criteria for Treatment:

- Absolute CD4 cell count less than or equal to 350 cells/μL; if less than 15% consult HIV specialist
- WHO clinical stage 3 or 4 disease

Regimen Options:

First Line:

For Children and Pre-Pubertal Adolescents:

AZT + 3TC + 1 NVP or EFV*

Alternative:

ABC + 3TC + 1 NVP or EFV**

* The preferred regimen for adolescents with tuberculosis is EFV + the 2 NRTI backbone.

** Use the alternative 1 line regimen only if there are contraindications to AZT (for example, severe anaemia, less than 7 g/dl; or neutropenia, less than 500 cells/mm)

Second Line:

Preferred 2nd line: ABC + 3TC + LPV/r

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

First Line:

Regimens for Post-Pubertal Adolescents (Tanner stages IV and V)

Preferred 1st line: TDF + FTC + NVP or EFV(Atripla)

Alternative 1st line: ABC + 3TC + NVP or EFV

Second Line:

Preferred 2nd line: AZT + 3TC + LPV/r

Third Line:

No regimen specified, specifically, if the clinical status of the patient is worsening, do not wait for more than 8 weeks for the resistance assay to return before changing to an empiric third line regimen, under Specialist guidance and approval only, pending eventual return of the resistance assay.

Reference:

Botswana National HIV & AIDS Treatment Guidelines (2012)

Infants and Children less than 5 Years

Year Issued:

2012

HIV/TB Co-Infection Addressed:

Yes

Criteria for Treatment:

All HIV-infected infants under age 24 months require prompt initiation of ART, regardless of immune and/or clinical status.

- Immediately refer all infants whose first DNA PCR is positive for ART initiation, without waiting for the confirmatory DNA PCR.
- Discuss any HIV-exposed baby who has a WHO stage 3 and 4 clinical condition and for whom the DNA-PCR is not available, with an HIV Specialist for possible initiation of ART, pending return of the DNA PCR, since such babies are at high risk for morbidity and mortality from HIV infection.
- Follow babies without WHO stage 3, and 4 clinical conditions, and for whom the DNA PCR is pending, on a monthly basis, completing WHO staging at each visit, since HIV infected babies are at high risk for clinical deterioration.

All HIV-infected children greater than 24 months and less than 5 years of age with either one of the following two conditions require immediate initiation of ART:

- “Advanced” or “severe” symptoms (i.e., WHO clinical stage 3 or 4)
- CD4 counts less than or equal to 750 cells/µL and CD4 less than or equal to 25%

Regimen Options:

First Line:

Before initiating ART, it is essential to determine whether or not the patient received sdNVP at birth or the mother was taking NNRTI-containing ART while the infant was in utero, since NNRTI resistance arising from NNRTI exposure can cause treatment failure with NNRTI-based ART. A history of maternal participation in PMTCT is a sufficient indicator of neonatal sdNVP exposure

Standard First Line Regimen in Treatment-Naïve Infants and Children:
•• AZT + 3TC + (NVP or EFV)
If less than 3 years of age, use NVP
If greater than 3 years of age use EFV
With baseline anemia (Hgb less than or equal to 7.00 gms/dL or AZT-induced anemia, or if the patient has symptoms attributable to anemia of any degree) substitute AZT with ABC.

All children under 3 years of age exposed to sdNVP should be started on PI-based regimen

- If the infant received sdNVP at birth:

If less than or equal to 1 month, consult an HIV Pediatric Specialist

If greater than 1 month and less than or equal to 3 years of age: AZT + 3TC + LPV/r.

If greater than 3 years of age and exposed to sdNVP:
AZT + 3TC + EFV

Second Line:

If pediatric patient fails first line AZT+3TC+NNRTI switch to ABC + 3TC + LPV/r

- If d4T had been used for first line regimen use AZT + 3TC + LPV/r
- If AZT cannot be used because of persistent anemia, consult an HIV Specialist

If a pediatric patient fails first line ABC + 3TC+ NNRTI depending on the level of development switch to CBV + LPV/r or TRU + LPV/r

- If patient is unable to tolerate AZT and is too young from TDF, consult an HIV Specialist

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Reference:

Botswana National HIV & AIDS Treatment Guidelines (2012)

Pregnant Women (Lifelong ART or TAP)

Year Issued:

2012

HIV/TB Co-Infection Addressed:

Yes

Criteria for Treatment:

ART Eligibility for pregnant HIV-infected women is the same as that for all other adults: CD4 ≤ 350 cells µL or WHO stage 3 or stage 4 conditions. Pregnant women who are eligible for ART must be given priority scheduling for ART initiation, without exception.

350 cells µL or WHO stage 3 or stage 4 conditions. Pregnant women who are eligible for ART

Regimen Options:

First Line:

Criteria

ART Eligibility for pregnant HIV-infected women is the same as that for all other adults: CD4 ≤ 350 cells µL or WHO stage 3 or stage 4 conditions. Pregnant women who are eligible for ART must be given priority scheduling for ART initiation, without exception.

Before 14 weeks gestation and after checking appropriate baseline labs:

- If CD4 counts ≤250 cells/µL: TRU/NVP
- If CD4 counts >250 cells/µL: TRU/ALU
- After delivery, if clinically and virologically stable make no changes to regimen for those placed on NVP containing regimens
- At labour, give supplemental AZT 300 mg every three hours, not to exceed 1,500 mg.

If renal insufficiency and no anemia:

- CD4 ≤250 begin CBV/NVP
- CD4 >250 begin CBV/ALU

If renal insufficiency with ANEMIA:

- CD4 ≤250 begin ABC/3TC/NVP
- CD4 >250 begin ABC/3TC/ALU

Starting at 14 weeks gestation and after checking appropriate baseline labs:

- Initiate TDF+FTC or 3TC+EFV (Atripla)

If renal insufficiency and no anemia: CBV+EFV

If renal insufficiency with ANEMIA: ABC+3TC+EFV

- For women on Atripla, who are clinically and virologically stable after delivery, make no treatment changes.
- For women on ABC containing regimens, if clinically and virologically stable, once renal insufficiency has resolved switch to Atripla.
- For women on either Atripla or ABC at labour, give supplemental AZT 300 mg every three hours, not to exceed 1,500 mg.

Criteria

350 cells µL or WHO stage 3 or stage 4 conditions. Pregnant women who are eligible for ART

After 28 Weeks gestation (who received ≤ 4 weeks prophylaxis):

It is critical that late presenting HIV-infected pregnant women are placed on appropriate ART as soon as possible. In cases where women appear clinically stable every effort should be made to initiate ART immediately.

In order to do this:

- Expedite all baseline laboratories so that they are received as a priority at the laboratory with results returned no later than 2 weeks.
- Ask women to return to the clinic as soon as possible (no longer than 3 days) with an adherence
  partner for ART counseling and initiation processes.
- For those women accompanied by an adherence partner, start Atripla immediately if the patient appears clinically stable.
- Make any necessary regimen adjustments within one week of receiving the results from the baseline labs.
- At onset of labour, give supplemental AZT 300 mg every three hours, not to exceed 1,500 mg and sdNVP.
- If patient appears clinically unstable discuss clinical management with an HIV Specialist.

Late ANC Presenters (seen at onset of labour)

- Give supplemental AZT 300 mg every three hours, not to exceed 1500 mg
- Give sdNVP 200 mg one time only
- Evaluate immediately post partum for ART eligibility

Reference:

Botswana National HIV & AIDS Treatment Guidelines (2012)
